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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,295

09/13/2005

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EXAMINER

HEINCER, LIAM J

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

10/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/516,295	Applicant(s) LACHOWICZ ET AL.	
	Examiner Liam J. Heincer	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 15, 2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Considering Claims 1-4 and 7-10: Claim 1 has been amended to recite two different molecular weight ranges for component B depending on the type of coating. It is unclear whether these limitations are required in the claim, as there is nothing in the rest of the claim to indicate that the which type of coating the claim is. As the word "and" is used to link the two possibilities, it appears that the claim requires two separate molecular weight ranges. For the purpose of further examination the claim is being interpreted as requiring only one of the two ranges in any one embodiment.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then

narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation "number average molecular weight", and the claim also recites "preferably in the range between 1,000 and 40,000" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noomen et al. (US Pat. 5,219,958) in view of Becker et al. (US Pat. 5,677,379).

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Considering Claim 1: Noomen et al. teaches a thermosetting/curable coating composition (1:13-17) comprising a compound having multiple activated unsaturated groups (2:30-3:21); a compound having at least two acetoacetate groups (4:49-56); a basic catalyst (5:15-32); and a carboxylic acid that is preferably formic, acetic or propionic acid (5:38-6:4). Noomen et al. also teaches the number average molecular weight of the acetoacetate compound as being from 230-30,000 (4:49-56) with a value of 1210 being used in the examples (8:22-40).

Noomen et al. does not teach the catalyst as being a tertiary alkyl phosphine. However, Becker et al. teaches using an alkyl phosphane/phosphine such as tributyl phosphane as a catalyst for a Michael reaction (13:51-67) between an activated unsaturated group and an activated hydrogen (1:45-2:9). Noomen et al. and Becker et al. are analogous art as they are concerned with the same field of endeavor, namely Michael addition curable compositions. It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the alkyl phosphane catalyst of Becker et al. in the composition of Noomen et al., and the motivation to do so would have been, as Becker et al. suggests, alkyl phosphanes are functionally equivalent to the amine catalysts of Noomen et al. in Michael addition curable compositions (13:51-67).

Noomen et al. does not teach adding the acid before the catalyst. However, the selection of any order of mixing ingredients is *prima facie* obvious. *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930). See MPEP § 2144.04. As there has been no showing of new or unexpected results, it would have been obvious to a person having ordinary skill in the art at the time of invention to have added the acid prior to the catalyst.

Considering Claim 2: Noomen et al. teaches the ratio of unsaturated groups to activated hydrogens as being from 1:4 to 4:1 (5:3-13).

Considering Claim 3: Noomen et al. teaches adding the catalyst in an amount of 0.05 to 3.0 weight percent (5:32-37) with 0.3 weight percent being used in an example (Example 1).

Considering Claim 4: Noomen et al. teaches the acid as being present in an amount of 0.22 weight percent (Example 1).

Considering Claims 7-10: Noomen et al. teaches the composition as being gelled/crosslinked (9:1-21).

Response to Arguments

Applicant's arguments filed July 15, 2008 have been fully considered but they are not persuasive, because:

A) Applicants argument that Noomen does not teach selecting a strong basic catalyst that avoids "cloudiness to the lacquer due to bad solubility, as well as considerable yellowing, as known" (Applicants arguments, page 5) is not persuasive. The reference cited in the specification to support this statement, Brindöpke et al. (US Pat. 4,871,822) does not in fact teach that the catalysts of Noomen et al. result in bad solubility and considerable yellowing. Rather, Brindöpke et al. teaches that alkali metal catalysts have these undesirable qualities (1:67-2:3). The catalysts disclosed in Noomen et al. (5:15-31) are actually part of the invention of Brindöpke et al. (16:20-24) that results in a reduction of these undesirable qualities..

B) Applicants argument that the references do not teach varying the number average molecular weight based on the application is not persuasive. As discussed above, the claim is being interpreted as requiring one of the claimed ranges depending on the embodiment. As Noomen et al. teaches a liquid composition with a molecular weight in the claimed range of 230 to 2000 (8:22-40), Noomen et al. is considered to meet the claim.

Irie et al. has been removed as the primary reference in response to amendment. Irie et al. teaches away from using an acetoacetate functional compound (1:62-67).

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Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./

Supervisory Patent Examiner, Art Unit 1796

27-Sep-08

LJH

September 18, 2008